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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,009	06/26/2001	Satchidanand Mishra	D/99021D	2624

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EXAMINER

NGUYEN, THUKHANH T

ART UNIT

PAPER NUMBER

1722

DATE MAILED: 05/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/892,009	MISHRA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thu Khanh T. Nguyen	1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other:  |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: the status of the patent applications mentioned under the continue information and in the specification needed to be updated.
2. The abstract should be one paragraph only and contains less than 150 words.  
Appropriate correction is required.

### *Claim Suggestion*

3. In claims 14 and 16, the word "abhesive" is suggested to change to —adhesive— to correct the misspelling mistake. For purpose of examination, the examiner assumes the word "abhesive" having the same meaning with the word adhesive. Please clarify.

### *Claim Rejections - 35 USC § 112*

4. Claims 13-21 and 25-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claims 13-16 and 25-26 are depended on canceled claim 9. For purpose of examination, these claims are assumed to be depended on claim 10. Clarification and/or correction are required.
6. Claim 27 is depended on a non-exist claim 30. For purpose of examination, claim 27 is assumed to be depended on claim 16. Clarification and/or correction are required.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 10-11, 13 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by De Woskin et al (2,804,419).

De Woskin et al teach an electronically heat-sealing apparatus, comprising a support member (1) having a smooth flat surface (3) supporting the plastic sheets (9, 11), a heatable member (5) having a flat surface (col. 1, line 66-69) for compressing a portion of the seam region of the sheet material (col. 2, lines 13-20); wherein the heating member is a compression heating bar (5) and a strip (13).

9. Claims 10-12, 15-17, and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Onishi (4,461,662).

Onishi teaches an ultrasonic welding apparatus comprising a support member (1, 2, 12) with a flat surface for supporting the workpieces (P, Q), a heatable member (15) compressing the seam portion of the workpieces (Fig. 4), wherein the heatable member is a metal rotatable compression wheel (Fig. 2, 15) has a heatable flat smooth surface to heat a portion of the workpieces on the flat surface of the support means, and a heatable plastic strip (R, S); the heating surface of the wheel comprises adhesive material such as silicon (col. 4, lines 49-57); the compression wheel (15) is manually moved by a lift lever (23).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 10 – 12, and 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heyse et al (4,746,391) in view of the Japanese reference (03-201367).

Heyse et al disclose an apparatus for continuous welding or sealing of seams of plastic films, comprising a support member (2) for receiving and supporting the thermoplastic sheet material, a heatable member (3, 6, 7) having smooth surface with a profile parallel to the smooth surface of the support member, wherein the heatable member is a strip (3) aligned for centering over the seam, a compression wheel (6, 7) contacts the strip to compress the strip against the seam, wherein the strip comprises alloy steel, steel/chromium/nickel alloy, which is relatively high electrical resistance (col. 4, lines 33-35); the strip (3) includes a coating layer of anti-adhesive material to prevent overheating (col. 5, lines 57-61).

Heyse et al fail to disclose that the support member includes a flat support surface.

The Japanese reference discloses an apparatus for welding a ribbon-shaped metal piece by means of ultrasonic seam, comprising a pressing roller (4, 5), a strip 3, a seam portion (2), and a base (1), wherein the base (1) could be supported by the rollers (Fig. 1) or a flat surface (Fig. 2).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Heyse et al by providing a supporting member with a flat surface

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as taught by the Japanese reference, because the supporting member with a flat surface would provide more support surface than a curve surface of a roller.

In regard to claim 20, it will depend on the material used that the strip could be heated to different temperature. It is in the scope of Heyse et al to heat the strip (3) and the seam to about 2°C-25°C. However, this is a functional limitation of the heating strip. It has been held that a functional limitation asserted to be critical for establishing novelty might, in fact, be an inherent characteristic of the prior art. The applicants is required to prove that the subject matter shown in the prior art does not necessarily possess the characteristics relied on. In re Schreiber, 128 F. 3d 1473, 1478, 44 USPQ 2d, 1432 (Fed. Cir. 1997); See also, In re Spada, 911 F 2d 705, 708, 15 USPQ 2d 1655, 1658 (Fed. Cir. 1977); In re Best, 562 F. 2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977); and Ex Parte Gray, 10 USPQ 2d 1922, 1925 (Bd. Pat. App. & Int. 1989).

In regard to claim 21, the size of the strip will depend on the thickness of the sheet material, the heating duration, the amount of electric applied that one of ordinary skill in the art could modify the size of the heating strip to provide a sufficient heating to the material. In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

12. Claims 14 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Woskin et al ('419) as applied to claims 10 and 13 above, and further in view of Schwarzkopf (3,551,259).

De Woskin et al disclose an apparatus for heat-sealing sheet material as described above, but fail to disclose the support surface having an adhesive surface such as Teflon coating.

Schwarzkopf discloses an apparatus for heat-sealing two superimposed plied, comprising a heatable compress member (1), a support member (5) with a flat surface (10) made of Teflon and a silicon rubber pad (6) to provide a removable backing for the support member.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify De Woskin et al by providing a Teflon layer on the flat support surface to prevent material from sticking into the support member when being heated.

In regard to claim 25, the size of the heating bar will depend on the thickness of the sheet material, the heating duration, the amount of electric applied that one of ordinary skill in the art could modify the size of the heating strip to provide a sufficient heating to the material. In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 703-305-7167. The examiner can normally be reached on Monday- Friday, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 703-308-0457. The fax phone numbers for the

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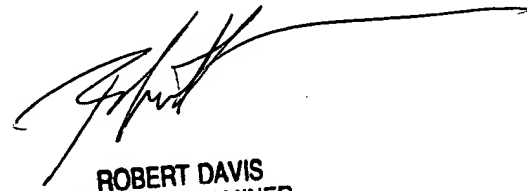
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organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

TN  
May 8, 2003



ROBERT DAVIS  
PRIMARY EXAMINER  
GROUP 1300 *nrc*  
*5/8/03*